

WE CLAIM:

5 1. A swing boom assembly, comprising:

(a) a fixed base;

(b) a pivot base rotatably mounted on said fixed base;

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(c) a boom pivotally coupled to said pivot base
proximate a lower end thereof and having a
hydraulic piston cylinder coupled between said
boom and an upper end of said pivot base and
operative to raise and lower said boom;

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wherein said pivot base has

(i) an upper shaft;

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(ii) a main body having a pair of spaced apart
clevis plates affixed to each end of said
upper shaft;

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(iii) a spherical bearing rigidly mounted around
said upper shaft between said clevis plates

and said bearing having an outer race rigidly mounted to said fixed base.

- 5 2. An assembly according to claim 1, wherein said hydraulic piston cylinder is pivotally coupled to said pivot base at a level intermediate said clevis plates
- 10 3. An assembly according to claim 1, wherein a line of action through said hydraulic piston cylinder passes through said spherical bearing when said hydraulic piston cylinder is near or at a horizontal position.
- 15 4. An assembly according to claim 1, including a lower pivot shaft rigidly coupled to said main body and a lower spherical bearing coupled to said lower pivot shaft and having an outer race rigidly coupled to said main body.
- 20 5. An assembly according to claim 1, wherein said fixed base is part of a skidder.
- 25 6. An assembly according to claim 4, including a swivel actuator mounted on said fixed base and coupled to said lower pivot shaft, operative to rotate said pivot base.
7. An assembly according to claim 1, wherein said clevis plates are integral with said main body.